

## ABSTRACT OF THE DISCLOSURE

The present invention provides an economically and industrially superior simple process that enables the selective production of an aromatic heterocyclic monoboron compound and aromatic heterocyclic diboron compound at a satisfactory yield and in a desired ratio by reacting an aromatic heterocyclic compound and a boron compound in a single step under mild conditions while changing only the charged ratios of the raw materials.

The present invention provides a production process of a heteroaryl mono- or diboron compound comprising an aromatic heterocyclic compound and a boron compound in the form of bis(pinacolate)diboron or pinacolate diborane in the presence of an iridium-containing catalyst and a ligand such as a bipyridyl ligand.